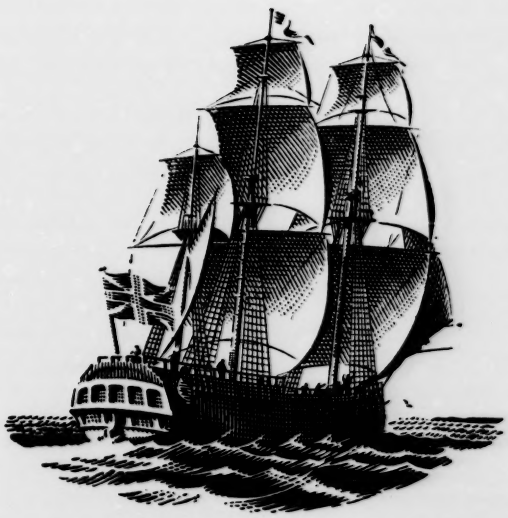

ENDEAVOUR

A review of the progress of science, published in five languages

VOLUME XXVI : 1967

Author index

ADDISON, C. C. Liquid sodium. 91.

ALLEN, N. L. The future of direct current power transmission. 16.

BERNHARD, C. G. Structural and functional adaptation in a visual system. 79.

BOON, W. R. The quaternary salts of bipyridyl—a new agricultural tool. 27.

BRUNET, P. C. J. Sclerotins. 68.

BURBIDGE, GEOFFREY. Neutrino astronomy. 50.

CALLEAR, A. B. Flash photolysis. 9.

COCKBURN, SIR ROBERT. Rocket propulsion and space research. 21.

DAINTON, F. S. The chemistry of the electron. 115.

DELGADO, JOSÉ M. R. Brain research and behavioural activity. 149.

EDITORIAL

Bicentenary of *The Nautical Almanac*. 2

Michael Faraday, 1791–1867. 114

Scientific interchange in Europe. 62.

GASKELL, T. F. North Sea gas. 140.

GUSTAFSON, T. *See* WOLPERT, L.

GREEN, M. L. H. Hydride complexes of transition metals. 129.

HAYES, WILLIAM. The mechanism of bacterial sexuality. 33.

LACY, D. The seminiferous tubule in mammals. 104.

MATTHEWS, P. T. Particle symmetry. 63.

MOTT, SIR NEVILL. The transition from metal to insulator. 155.

OSBORN, J. A. Homogeneous catalysis. 144.

PENTZ, MICHAEL J. The CERN intersecting storage rings. 126.

PERUTZ, M. F. Some molecular controls in biology. 3.

PRICE, W. C. Photoionization and the electron structure of molecules. 75.

ROBERTSON, R. N. The separation of protons and electrons as a fundamental biological process. 134.

RUTTER, A. J. Evaporation in forests. 39.

WATERS, D. W. The restoration of the Royal Observatory Greenwich. 122.

WEST, T. S. Atomic analysis in flames. 44.

WILLIAMS, R. J. P. Heavy metals in biological systems. 96.

WOLPERT, L. and GUSTAFSON, T. Cell movement and cell contact in sea urchin morphogenesis. 85.

Book reviews

AIBA, S., HUMPHREY, A., and MILLIS, N. F. Biochemical Engineering. 160.

ARMITAGE, A. Edmond Halley. 111.

BARNES, HAROLD (Editor). Some Contemporary Studies in Marine Science. 162.

BONEY, A. D. A Biology of Marine Algae. 111.

BOUIX, M. Les discontinuités du rayonnement électromagnétique. 159.

BROWN, SANBOURN C. and CLARKE, N. (Editors). The Education of a Physicist. 54.

BROWN-GRANT, K. and CROSS, B. A. (Editors). Recent Studies on the Hypothalamus. 162.

BURCHFIELD, H. P. and JOHNSON, D. E. (Editors). Guide to the Analysis of Pesticide Residues, Vols. I and II. 58.

BURFOOT, J. C. Ferroelectrics: An Introduction to Physical Principles. 160.

BURGER, DIONYS. Sphereland: A Fantasy about Curved Spaces and an Expanding Universe (translated from the Dutch by Cornelie J. Rheinboldt). 159.

BURKHARDT, D., SCHLEIDT, W., and ALTNER, H. (Editors). Signale in der Tierwelt. Vom Vorsprung der Natur. 161.

BURKIN, A. R. The Chemistry of Hydrometallurgical Processes. 111.

CABANNES, H. Cours de mécanique générale (2nd edition). 55.

CHARLOT, G. Les méthodes de la chimie analytique: Analyse quantitative minérale (5th edition). 109.

CHRÉTIEN, A., KOHLMULLER, R., PASCAL, P., and ROLLET, A.-P. Nouveau traité de chimie minérale. Vol. II, No. I, Lithium, sodium. 109.

CHRÉTIEN, M. and DESER, S. (Editors). 1965 Brandeis University Summer Lectures in Theoretical Physics, Vols. I and II. 159.

CROFTON, H. D. Nematodes. 111.

CROSLAND, MAURICE. The Society of Arcueil; a View of French Science at the Time of Napoleon I. 163.

DASENT, W. E. Nonexistent Compounds. 56.

DEAN, A. C. R. and HINSHELWOOD, CYRIL. Growth Function and Regulation in Bacterial Cells. 160.

DEFAY, R. and PRIGOGINE, I. with the collaboration of Bellemans, A. Surface Tension and Adsorption (translated from the French by Everett, D. H.). 109.

DOGIEL, V. A. General Protozoology (translated from the Russian and edited by Hoare, C. A.). 161.

ELWELL, W. T. and SCHOLES, I. R. The Analysis of Copper and its Alloys. 163.

FRIEDE, REINHARD. L. Topographic Brain Chemistry. 110.

FREY-WYSSLING, A. and MÜHLETALER, K. Ultrastructural Plant Cytology. 57.

GRANIT, R. (Editor). Muscular Afferents and Motor Control. 110.

HARDIE, D. W. F. and DAVIDSON PRATT, J. A History of the Modern British Chemical Industry. 59.

HARRISON, W. A. Pseudopotentials in the Theory of Metals. 55.

HUGHES, G. M. (Editor). Nervous and Hormonal Mechanisms of Integration. 162.

IMBESI, A. (compiled by). Index Plantarum quae in omnium Populorum Pharmacopoeis sunt adhuc receptae. 162.

JOHNSON, A. WILLIAM. Ylid Chemistry. 109.

KIRK, J. T. O. and TILNEY-BASSETT, R. A. E. The Plastids. 161.

KNOWLES MIDDLETON, W. E. A History of the Theories of Rain. 59.

KONOPINSKI, E. J. The Theory of Beta Radioactivity. 109.

KOPAL, ZDĚNEK. An Introduction to the Study of the Moon. 159.

LEHMANN, H. and HUNTSMAN, R. G. Man's Haemoglobins. 57.

LINSER, HANS (Editor). Handbuch der Pflanzenernährung und Düngung, Vol. II. 161.

LUMSDEN, J. Thermodynamics of Molten Salt Mixtures. 160.

LUNDEGÅRDH, HENRIK. Plant Physiology (translated by Irvine, F. M.; edited by James, W. O.). 110.

MAALØ, O. and KJELDGAARD, N. O. Control of Macromolecular Synthesis. 56.

MESCHKOWSKI, HERBERT. Unsolved and Unsolvable Problems in Geometry (translated from the German by Burlak, Jane A. C.). 159.

OLBY, R. C. Origins of Mendelism. 59.

OSMAN, W. C. Primates: Comparative Anatomy and Taxonomy. Vol. VI. Catarrhini, Cercopithecoidea, Cercopithecinae. 58.

PRIDHAM, J. B. and SWAIN, T. (Editors). Biosynthetic Pathways in Higher Plants. 57.

REED, GERALD. Enzymes in Food Processing. 162.
SCHATZMAN, E. The Origin and Evolution of the Universe (translated from the French by Bernard and Annabel Pagel). 55.
SCHORMÜLLER, J. Die Erhaltung der Lebensmittel. 58.
SCHRIER, A. M., HARLOW, H. F., and STOLLNITZ, F. (Editors). Behavior of Nonhuman Primates, Vols. I and II. 58.
SPRING, K. H. (Editor). Direct Generation of Electricity. 55.
STACEY, M., TATLOW, J. C., and SHARPE, A. G. (Editors). Advances in Fluorine Chemistry, Vol. V. 56.
STEARN, W. T. Botanical Latin. 110.
STEVENS, R. (Editor). Dictionary of Organic Compounds (2nd supplement to 4th edition). 56.
SZABO, D. Medical Colour Photomicrography. 163.
TAYLOR, E. G. R. The Mathematical Practitioners of Hanoverian England 1714–1840. 59.
TOMONAGA, SIN-ITIRO. Quantum Mechanics, Vol. II, New Quantum Theory. 108.
UVAROV, SIR BORIS. Grasshoppers and Locusts, Vol. I. 57.
WALKER, P. L., JR. (Editor). Chemistry and Physics of Carbon, Vol. I. 55.
WHITTEN, R. C. and POPPOFF, I. G. Physics of the Lower Ionosphere. 56.

Subject index

The articles are arranged, with regard to subjects, in numerical order according to the Universal Decimal Classification (Brit. Std. 1000). An alphabetical key is to be found on page IV.

3 **Social Sciences**

325.32:5/6 Scientific interchange in Europe (Editorial). 62.

5 **Natural Sciences**

5/6:325.32 Scientific interchange in Europe (Editorial). 62.

52 **Astronomy**

522.1(421):93 The restoration of the Royal Observatory Greenwich. Waters, D. W. 122.
523.872:539.123 Neutrino astronomy. Burbidge, Geoffrey. 50.
523.892.2:93 Bicentenary of *The Nautical Almanac* (Editorial). 2.

53 **Physics**

53/54:92 Michael Faraday, 1791–1867 (Editorial). 114.
537.311.33 :621.315.59 The transition from metal to insulator. Mott, Sir Nevill. 155.
539.123:523.872 Neutrino astronomy. Burbidge, Geoffrey. 50.
539.124:541.27 The chemistry of the electron. Dainton, F. S. 115.
539.14 Particle symmetry. Matthews, P. T. 63.
539.194 Photoionization and the electron structure of molecules. Price, W. C. 75.

54 **Chemistry**

541.128.12 Homogeneous catalysis. Osborn, J. A. 144.
541.145 Flash photolysis. Callear, A. B. 9.
541.27:539.124 The chemistry of the electron. Dainton, F. S. 115.
541.44:546.9 Hydride complexes of transition metals. Green, M. L. H. 129.
543.42 Atomic analysis in flames. West, T. S. 44.
546.3:577.13 Heavy metals in biological systems. Williams, R. J. P. 96.
546.33–14 Liquid sodium. Addison, C. C. 91.
546.9:541.44 Hydride complexes of transition metals. Green, M. L. H. 129.
547.823:632.954 The quaternary salts of bipyridyl—a new agricultural tool. Boon, W. R. 27.
547.962.9:577.11 :591.471.27 Sclerotins. Brunet, P. C. J. 68.

55 **Geophysics. Geology**

551.48:634.0.1 Evaporation in forests. Rutter, A. J. 39.
553.981(261.2) North Sea gas. Gaskell, T. F. 140.

57 **Biological Sciences. Biochemistry**

576.34:577.1 The separation of protons and electrons as a fundamental biological process. Robertson, R. N. 134.
576.34:593.95 Cell movement and cell contact in sea urchin morphogenesis. Wolpert, L. and Gustafson, T. 85.
576.851:577.8 The mechanism of bacterial sexuality. Hayes, William. 33.
577.1:576.34 The separation of protons and electrons as a fundamental biological process. Robertson, R. N. 134.
577.11 :591.471.27 :547.962.9 Sclerotins. Brunet, P. C. J. 68.
577.13:546.3 Heavy metals in biological systems. Williams, R. J. P. 96.
577.15 Some molecular controls in biology. Perutz, M. F. 3.
577.8:576.851 The mechanism of bacterial sexuality. Hayes, William. 33.

59 **Physiology. Zoology**

591.18:591.48 Brain research and behavioural activity. Delgado, José M. R. 149.
591.463.3 The seminiferous tubule in mammals. Lacy, D. 101.
591.471.27 :547.962.9 :577.11 Sclerotins. Brunet, P. C. J. 68.
591.48:591.18 Brain research and behavioural activity. Delgado, José M. R. 149.
591.484.4 Structural and functional adaptation in a visual system. Bernhard, C. G. 79.
593.95:576.34 Cell movement and cell contact in sea urchin morphogenesis. Wolpert, L. and Gustafson, T. 85.

62 **Engineering Sciences**

621.315.051.024 The future of direct current power transmission. Allen, N. L. 16.
621.315.59 :537.311.33 The transition from metal to insulator. Mott, Sir Nevill. 155.
621.384.665 The CERN intersecting storage rings. Pentz, Michael J. 126.
621.455:629.19 Rocket propulsion and space research. Cockburn, Sir Robert. 21.
629.19:621.455 *Idem.*